

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Jong Seob LEE et al.

Group Art Unit: Unassigned

Application No.: Unassigned

Examiner: Unassigned

Filing Date: February 19, 2004

Confirmation No.: Unassigned

Title: GENE CONTROLLING FLOWERING TIME OF PLANTS AND METHOD FOR MANIPULATING  
FLOWERING TIME OF PLANT USING THE SAME

FIRST  
INFORMATION DISCLOSURE STATEMENT  
TRANSMITTAL LETTER

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Enclosed is a FIRST Information Disclosure Statement and accompanying form PTO-1449 for the above-identified patent application.

- ☒ No additional fee for submission of an IDS is required.
- ☐ The fee of \$180.00 (1806) as set forth in 37 C.F.R. § 1.17(p) is also enclosed.
- ☐ A statement under 37 C.F.R. § 1.97(e) is also enclosed.
- ☐ A statement under 37 C.F.R. § 1.97(e), and the fee of \$180.00 (1806) as set forth in 37 C.F.R. § 1.17(p) are also enclosed.
- ☐ Charge \_\_\_\_\_ to Deposit Account No. 02-4800 for the fee due.
- ☐ A check in the amount of \_\_\_\_\_ is enclosed for the fee due.

The Director is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17 and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800. This paper is submitted in duplicate.


Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

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Alexandria, Virginia 22313-1404  
(703) 836-6620

Date: February 19, 2004

By

  
Susan M. Dadio  
Registration No. 40,373

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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Jong Seob LEE et al.	)	Group Art Unit: Unassigned
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For: GENE CONTROLLING FLOWERING	)	
TIME OF PLANTS AND METHOD	)	
FOR MANIPULATING FLOWERING	)	
TIME OF PLANT USING THE SAME	)	

**FIRST  
INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure as set forth in 37 C.F.R. § 1.56, Applicants hereby submit the following information in conformance with 37 C.F.R. §§ 1.97 and 1.98.

Pursuant to 37 C.F.R. § 1.98, a copy of each of the documents cited is enclosed.

**U.S. PATENT DOCUMENTS**

1. U.S. Patent No. 6,225,530 B1, Wiegel et al., issued May 1, 2001
2. U.S. Patent No. 6,444,877 B1, Rottman, issued September 3, 2002

**NON-PATENT DOCUMENTS**

1. Poethig, R., "Phase Change and the Regulation of Shoot Morphogenesis in Plants." Science, vol. 250, 1990, pp. 923-930. Amer. Assn. for the Advancement of Science, Washington, D.C.
2. Simpson et al., "When to Switch to Flowering." Annu. Rev. Cell Dev. Biol. 15, 1999, pp. 519-550. Annual Reviews, Palo Alto, CA.
3. Araki, T., "Transition from vegetative to reproductive phase." Curr. Opin. Plant Biol. 4, 2001, pp. 63-68. Current Biology, Ltd., London, England.
4. Levy, Y. et al., "The Transition to Flowering." The Plant Cell, Vol. 10, 1998, pp. 1973-1989. American Society of Plant Physiologists, Rockville, MD.

5. Hepworth, S.R. et al., "Antagonistic regulation of flowering-time gene *SOC1* by CONSTANS and FLC via separate promoter motifs." *EMBO Journal*, Vol. 21, 2002, pp. 4327-4337. Oxford University Press, Oxford, England.
6. Duval, M. et al., "Molecular characterization of *AtNAM*: a member of the *Arabidopsis* NAC domain superfamily." *Plant Molecular Biology*, Vol. 50, 2002, pp. 237-248. Kluwer Academic, Dordrecht, Holland.
7. Michaels, S. et al., "*FLOWERING LOCUS C* Encodes a Novel MADS Domain Protein That Acts as a Repressor of Flowering." *The Plant Cell*, Vol. 11, May 1999, pp. 949-956. American Society of Plant Physiologists, Rockville, MD.

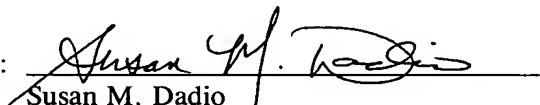
The documents are being submitted within three (3) months of the filing or entry of the national stage of this application or before the first Office Action on the merits, whichever is later. Since documents are being filed within the time period set forth in 37 C.F.R. § 1.97(b) no fee or statement is required.

To assist the Examiner, the documents are listed on the attached form PTO-1449. It is respectfully requested that an Examiner-initialed copy of this form be returned to the undersigned.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

Date: February 19, 2004

By:   
Susan M. Dadio  
Registration No. 40,373

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Substitute for forms 1449A/PTO & 1449B/PTO  <b>FIRST INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>	ATTORNEY'S DKT NO. 012679-105	APPLICATION NO. Unassigned
	APPLICANT Jong Seob LEE et al.	
	FILING DATE February 19, 2004	GROUP Unassigned

U.S. PATENT DOCUMENTS				
Examiner Initials	Document Number	Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Issue/Publication Date (MM-DD-YYYY)
	6,225,530	B1	Weigel et al.	05-01-2001
	6,444,877	B1	Rottmann	09-03-2002

FOREIGN PATENT DOCUMENTS					
Examiner Initials	Document Number	Kind Code (if known)	Country	Date of Publication (MM-DD-YYYY)	Translation Yes No

NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Include name of author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	Poethig, R., "Phase Change and the Regulation of Shoot Morphogenesis in Plants." Science, Vol. 250, 1990, pp. 923-930. Amer. Assn. for the Advancement of Science, Washington, D.C.
	Simpson et al., "When to Switch to Flowering." Annu. Rev. Cell Dev. Biol., Vol. 15, 1999, pp. 519-550. Annual Reviews, Palo Alto, CA.
	Araki, T., "Transition from vegetative to reproductive phase." Curr. Opin. Plant Biol., Vol. 4, 2001, pp. 63-68. Current Biology, Ltd., London, England.
	Levy, Y. et al., "The Transition to Flowering." The Plant Cell, Vol. 10, 1998, pp. 1973-1989. American Society of Plant Physiologists, Rockville, MD.
	Hepworth, S.R. et al., "Antagonistic regulation of flowering-time gene <i>SOC1</i> by CONSTANS and FLC via separate promoter motifs." EMBO Journal, Vol. 21, 2002, pp. 4327-4337. Oxford University Press, Oxford, England.
	Duval, M. et al., "Molecular characterization of <i>AtNAM</i> : a member of the <i>Arabidopsis</i> NAC domain superfamily." Plant Molecular Biology, Vol. 50, 2002, pp. 237-248. Kluwer Academic, Dordrecht, Holland.
	Michaels, S. et al., " <i>FLOWERING LOCUS C</i> Encodes a Novel MADS Domain Protein That Acts as a Repressor of Flowering." The Plant Cell, Vol. 11, May 1999, pp. 949-956. American Society of Plant Physiologists, Rockville, MD.

Examiner Signature		Date Considered	
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.